MEMOIRS

OF THE

COLLEGE OF SCIENCE

UNIVERSITY OF KYOTO

SERIES A

VOL. XXIX

1958~1961

KYOTO

Digitized by the Internet Archive
in 2024

https://archive.org/details/memoirs-faculty-science-kyoto-phys-astro-geophys-chem_1958-1961_29_contents

CONTENTS OF VOLUME XXIX

PAGE

T. Mikumo—On the Periods of Seismic Waves observed in Local Earthquakes. 1

A. Kamitsuki—On the Seismic Waves reflected at the Mohorovičić Discontinuity (II). 19

T. Nishitake—On the Materials in the Earth's Mantle. . . . 37

T. Nishitake—Elasticity of Solids at High Pressure and the Earth's Mantle. 47

M. Yamano—Precise Measurement of Frequency Shift of Ammonia Inversion Spectrum. 57

M. Yamano—Center Frequency of Ammonia Inversion Spectrum in Low Pressure Region. 67

T. Tomotika—On the Influence of Oxygen Gas upon the Optical Absorption Bands of Evaporated Barium Oxides in the Ultraviolet Region. 75

Y. Ishida—Ultrasonic Velocity and Adiabatic Compressibility of Mixture of Sulfuric Acid and Water. 91

A. Hattori and **B. Yada**—Optical Observations of the Second Russian Earth Satellite. 107

T. Nakamura, K. Fukunaga, K. Takamatsu and **S. Yasumi**—Absolute Measurement of γ quanta. 141

S. Takemoto—Ferromagnetic Resonance in Ni-Cd Ferrite System at Microwave Frequencies. 153

A. Kamitsuki—On Local Character of Poisson's Ratio in the Earth's Crust. 163

Y. Ishida—Adiabatic Compressibility of Aqueous Solution of Inorganic Acid. 187

Y. Fujiki—A New Compound in Au-Pb Alloy System. . . . 197

T. Hashi, A. Hirai, M. Sasaki and **T. Kawai**—Nuclear Magnetic Resonance Pulse Apparatus. 205

A. Kamitsuki—On Azimuthal Distribution of the Crustal Poisson's Ratio in case of Earthquake Occurrence . . . 213

CONTENTS OF VOLUME XXIX

PAGE

T. Mikumo—A Consideration on Generation Mechanism of Local Earthquake. 221

T. Nakau—Magnetic Resonance in $Ti_mMg_nFe_{3-m-n}O_4$ Ferrites and their Magnetization. 241

A. Hirai—Temperature Dependence of Spin Lattice Relaxation Time of Cl^{35} in Pure Quadrupole Resonance. 257

H. Ogata, H. Itoh, Y. Masuda, K. Takamatsu, M. Kawashima, A. Masaike and **I. Kumabe**—Numerical Differential Cross Sections of the (p, α) Reactions on Al^{27}, Mn^{55} and Co^{59}. . 267

K. Yuhara—Hydrological Study of Atami Hot Springs. . . . 283

Y. Toba—Drop Production by Bursting of Air Bubbles on the Sea Surface (III). Study by Use of a Wind Flume. . . 313

A. Hirai and **T. Kawai**—NMR Pulse Apparatus and its Application to the Investigation of Internal Motion of High Polymer (Poly-propylene). 345

S. Tanaka—Electron Density Measurement by Microwave Interferometer. 353

S. Tanaka—Absorption at Electron Cyclotron Resonance in Slightly Ionized Gases (I). 361

S. Tanaka—Absorption at Electron Cyclotron Resonance in Slightly Ionized Gases (II). 371

S. Tanaka—Absorption at Electron Cyclotron Resonance in Slightly Ionized Gases (III). 381

S. Tanaka—Microwave Conductivity of Bounded Plasma. . . 395